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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/362,020	07/27/1999	ROBERT J. MEYER	D/96602Q2	6310

7590 10/25/2002

JOHN E BECK  
XEROX CORPORATION  
XEROX SQUARE 20A  
ROCHESTER, NY 14644

EXAMINER

LAMB, TWYLER MARIE

ART UNIT

PAPER NUMBER

2622

DATE MAILED: 10/25/2002

7

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/362,020

Applicant(s)

MEYER ET AL.

Examiner

Twyler M. Lamb

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Notice to Applicant(s)***

1. This action is responsive to the following communications: After Final Amendment X filed on 9/26/02.
2. This application has been reconsidered. Claims 1-20 are pending.

***Withdrawal of Finality***

3. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

***Claim Rejections - 35 U.S.C. § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371<sup>(e)</sup> of this title before the invention thereof by the applicant for patent.

5. Claims 1-4, 8, 9, 13-15 and 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Eki et al. (Eki) (US 5,706,046).

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With regard to claim 1, Eki discloses an improved electronically stored font (col 7, line 56 – col 8, line 3) for use in an electrostatographic machine, comprising: a font representation (According to page 12, lines 7-13, the font representation is defined as a collection of capital and lower case letters, numeric and special characters of one particular type face and style to be utilized in electronic displays and printers, which reads on image data suitable for use in a digital printer, copier or facsimile which represent text or line art) (col 7, line 56 – col 8, line 3); and a non-printing auxiliary pixel embedded in the font representation to improve the printing of the font (col 6, lines 45-54; col 15, lines 19-26).

With regard to claim 2, Eki also discloses wherein the auxiliary pixel comprises a “black” auxiliary pixel (which reads on being able to perform using black-and-white or multi-color printing) (col 7, lines 14-20).

With regard to claim 3, Eki also discloses wherein the auxiliary pixel comprises a “white” auxiliary pixel (which reads on being able to perform using black-and-white or multi-color printing) (col 7, lines 14-20).

With regard to claim 4, Eki also discloses wherein the font representation is a bit map type (col 7, line 56 – col 8, line 3).

With regard to claim 8, Eki discloses a method for improving a text image (which reads on removing jaggedness in an outline section of characters, graphics, etc. (dejagging)) (col 2, lines 29-38; col 7, line 56 – col 8, line 3), comprising receiving (which reads on print data signal being inputted from the host computer) (col 6, lines 32-35, col 6, lines 38-39) text data (which reads on characters) (col 2, lines 29-38); and

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processing the text data with a font representation (According to page 12, lines 7-13, the font representation is defined as a collection of capital and lower case letters, numeric and special characters of one particular type face and style to be utilized in electronic displays and printers, which reads on image data suitable for use in a digital printer, copier or facsimile which represent text or line art) (col 7, line 56 – col 8, line 3) including embedded non-printing auxiliary pixels therein (col 6, lines 45-54; col 15, lines 19-26).

With regard to claims 9 and 15, Eki also discloses wherein the step of processing includes using a font representation of a bit map type (col 7, line 56 – col 8, line 3).

With regard to claim 13, Eki discloses in a digital imaging system (Figure 2, color laser beam printer including printer controller 4 coupled to the image processor 5 which is connected to host computer 6), a method for optimizing a rendition of a text image (which reads on removing jaggedness in an outline section of characters, graphics, etc. (dejagging)) (col 2, lines 29-38; col 7, line 56 – col 8, line 3), comprising: receiving text data (which reads on print data signal being inputted from the host computer) (col 6, lines 32-35, col 6, lines 38-39) text data (which reads on characters) (col 2, lines 29-38); and processing the text data with a font representation (According to page 12, lines 7-13, the font representation is defined as a collection of capital and lower case letters, numeric and special characters of one particular type face and style to be utilized in electronic displays and printers, which reads on image data suitable for use in a digital printer, copier or facsimile which represent text or line art) (col 7, line 56 – col 8, line 3)

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including therein embedded non-printing auxiliary pixels to improve the rendition of the text image (col 6, lines 45-54; col 15, lines 19-26).

With regard to claim 14, Eki also includes wherein the step of processing comprises generating image text using a processing system including a digital front end (which reads on host computer outputting print data signal) (Figure 2, color laser beam printer including printer controller 4 coupled to the image processor 5 which is connected to host computer 6) (col 6, lines 32-35).

With regard to claim 19, Eki also includes wherein the bit map representation has auxiliary pixels as previously stored therein (col 6, lines 45-54; col 15, lines 19-26).

With regard to claim 20, Eki also includes wherein the bit map representation has auxiliary pixels inserted therein by a method comprising: stepping a  $n \times n$  window across each pixel location in the bit map (which reads on discriminating with a  $m$ -numbered line in an  $n$ -numbered row) (col 8, line 45 – col 10, line 17); counting the number of “on” pixels in the window (which reads on showing the dot pattern including the dots to be printed) (col 9, lines 11-46); and comparing the number against a set threshold number to determine if the location is in an area of font detail (which reads on during the discrimination process ensuring the printing dots receive modulation) (col 9, line 36 – col 10, line 17).

### ***Claim Rejections - 35 U.S.C. § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5-7, 10-12 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eki et al. (Eki) (US 5,706,046) in view of Zack et al. (Zack) (US 5,459,828).

With regard to claim 5, Eki differs from claim 5 in that he does not clearly teach wherein the font representation is a contour type.

Zack discloses a method of producing a raster font that teaches wherein the font representation is a contour type (Figure 1, contour font 10, col 3, lines 3-7).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Eki to include wherein the font representation is a contour type as taught by Zack. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Eki by the teaching of Zack to convert contour fonts to bitmap fonts with automatic thickening and thinning to produce a raster font as taught by Zack in col 2, lines 38-55.

With regard to claim 6, Eki differs from claim 6 in that he does not clearly teach wherein the font representation is a spline-knot type.

Zack discloses a method of producing a raster font that teaches wherein the font representation is a spline-knot type (According to page 12, lines 19-20, contours may be represented by spline knots and stored on disk to be rasterized later, which reads on a

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contour font being analyzed and altered to produce a raster font) (Figure 1, contour font 10, col 3, lines 3-7; col 2, lines 38-55).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Eki to include wherein the font representation is a spline-knot type as taught by Zack. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Eki by the teaching of Zack to convert contour fonts to bitmap fonts with automatic thickening and thinning to produce a raster font as taught by Zack in col 2, lines 38-55.

With regard to claim 7, Eki differs from claim 7 in that he does not clearly teach wherein the font representation is a bit meta type.

Zack discloses a method of producing a raster font that teaches wherein the font representation is a meta type (According to page 12, lines 22-26, meta type font representation contains no art work master to start with and spline functions are used instead to form the median or skeleton of the desired font map, which reads on a hint which defines the parameters defining the font) (Figure 12, hint generation step 20, col 3, lines 6-58).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Eki to include wherein the font representation is a meta type as taught by Zack. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Eki by the teaching of Zack to simplify the type of information necessary to produce a raster font as taught by Zack in col 3, lines 54-58.



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With regard to claims 10 and 16, Eki differs from claims 10 and 16 in that he does not clearly teach wherein the step of processing includes using a font representation of a contour type.

Zack discloses a method of producing a raster font that teaches wherein the font representation is a contour type (Figure 1, contour font 10, col 3, lines 3-7).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Eki to include wherein the font representation is a contour type as taught by Zack. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Eki by the teaching of Zack to convert contour fonts to bitmap fonts with automatic thickening and thinning to produce a raster font as taught by Zack in col 2, lines 38-55.

With regard to claims 11 and 17, Eki differs from claims 11 and 17 in that he does not clearly teach wherein the step of processing includes using a font representation of a spline-knot type.

Zack discloses a method of producing a raster font that teaches wherein the font representation is a spline-knot type (According to page 12, lines 19-20, contours may be represented by spline knots and stored on disk to be rasterized later, which reads on a contour font being analyzed and altered to produce a raster font) (Figure 1, contour font 10, col 3, lines 3-7; col 2, lines 38-55).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Eki to include wherein the font representation is a spline-knot type as taught by Zack. It would have been obvious to one of ordinary skill

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in the art at the time of the invention to have modified Eki by the teaching of Zack to convert contour fonts to bitmap fonts with automatic thickening and thinning to produce a raster font as taught by Zack in col 2, lines 38-55.

With regard to claims 12 and 18, Eki differs from claims 12 and 18 in that he does not clearly teach wherein the step of processing includes using a font representation of a bit meta type.

Zack discloses a method of producing a raster font that teaches wherein the font representation is a meta type (According to page 12, lines 22-26, meta type font representation contains no art work master to start with and spline functions are used instead to form the median or skeleton of the desired font map, which reads on a hint which defines the parameters defining the font) (Figure 12, hint generation step 20, col 3, lines 6-58).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Eki to include wherein the font representation is a meta type as taught by Zack. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Eki by the teaching of Zack to simplify the type of information necessary to produce a raster font as taught by Zack in col 3, lines 54-58.

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

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**Conclusion**

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Twyler Lamb whose telephone number is (703) 308-8823.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
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or faxed to:

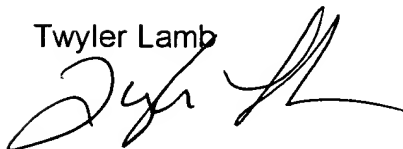
(703) 308-9051 (for formal communications intended for entry)  
(703) 308-5397 (for informal or draft communications, such as proposed amendments to be

discussed at an interview; please label such communications "PROPOSED" or "DRAFT")

or hand-carried to:

Crystal Park Two  
2121 Crystal Drive  
Arlington, VA.  
Sixth Floor (Receptionist)

Twyler Lamb



October 22, 2002

MARK WALLERSON  
PRIMARY EXAMINER

